

REMARKS

Reconsideration and allowance of this application are respectfully requested in light of the amendment and the following remarks.

At the outset, Applicants would like to thank the Examiner for the courtesy extended to Applicants' representative at the Interview conducted March 2, 2011. The participants were Examiner I Akram and David Ward, Reg. No. 45198. It is believed that the substance of the interview as set forth in the Interview Summary mailed March 3, 2011 is reasonably accurate. Applicants, therefore, make no further comment.

Claim 1 has been amended. Support for the amendment is literally provided in Applicants' Fig. 1. Corresponding description of the relevance of the structure described in the figure and amendment is found at paragraph [0154] of the published application.

Claims 9-15 and 18-29 stand withdrawn as being directed toward non-elected subject matter. Applicants note that the withdrawn claims depend directly or indirectly from all elected claims. Once the subject matter of the elected claims has been determined to be allowable, then the withdrawn claims should also be allowed.

Claims 1-8, 16, and 17 were rejected, under 35 USC §102(b), as being anticipated by Komiya et al. (2002/0042035). To the extent the rejections may be deemed applicable to the amended claims, the Applicants respectfully traverse as follows.

The invention as set forth in claim 1 is to a hydrogen generator. The generator is comprised of a first tubular wall element; a second tubular wall element located outside and coaxially with the first tubular wall element; and a tubular water evaporator located within the tubular walls. A tubular reforming catalyst body is also located between the first and second

tubular wall elements. The generator further includes a water inlet and a gas feed inlet, wherein the water inlet and the feed gas inlet are configured to inject water and feed gas through their respective inlets so as to contact the tubular water evaporator at a location separate from one another.

Komiya discloses a single-pipe cylinder type reformer. Komiya's Fig. 1 shows the reformer in the form of a cross-sectional diagram. This figure shows that water is injected through an inlet 20, then flows through channel 25 toward a gap that spans the circumference of cylindrical wall 62. At the same time, gas is injected through inlet 26, and also flows toward that same gap. As such, the water and gas are mixed together, flowed around wall element 62 and into the gap, with the mixture then being passed into the pre-heat layer 51a.

The Komiya device differs from the invention of claim 1 in that the Komiya reformer is not configured such that the water inlet and the feed gas inlet inject water and feed gas through their respective inlets so as to contact the tubular water evaporator at a location separate from one another. As noted above, and as further described at paragraphs 0065 of Komiya, both raw material gas and water flow together so that they both contact the pre-heat layer 51a simultaneously at the same locations. This means that the gas and water are heated together in the Komiya device, whereas in the device set forth in claim 1 provides for water injection at a separate location relative to the gas. The result with regard to the claimed device is a substantial benefit concerning heat efficiency and distribution of fluid in comparison with the Komiya device. Accordingly, Komiya fails to disclose or suggest the type of hydrogen generator set forth in claim 1 and the claims depending therefrom.

Applicants submit that Komiya does not disclose or suggest all of the subject matter of claim 1 and, as a result, does not anticipate or render obvious claim 1. Therefore, allowance of claim 1 and all claims dependent therefrom is warranted.

In view of the above, it is submitted that this application is in condition for allowance, and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,

/James Edward Ledbetter/

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JEL/RDJ/att

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